

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. - 19 (Canceled)
20. (Original) An imaging device comprising:
a plurality of photosensors two-dimensionally arranged on a light-receiving surface, for generating photo signals in accordance with an amount of received light; and
a readout section reading out the generated photo signals, wherein
said readout section selectively has a grid imaging mode in which the generated photo signals on the light-receiving surface are sampled in a grid pattern for readout, and a diagonal grid imaging mode in which the generated photo signals on the light-receiving surface are sampled in a diagonal grid pattern for readout.
21. (Original) The imaging device according to claim 20, wherein:
said plurality of photosensors are arranged in a grid pattern on the light-receiving surface; and
in the diagonal grid imaging mode said readout section adds up the photo signals for readout in each area around a crosspoint of the diagonal grid pattern.
22. (Original) The imaging device according to claim 21, further comprising
an optical low pass filter disposed on the light-receiving surface, for blurring an optical image in a direction substantially perpendicular to an adding-up direction of the photo signals.
23. (Original) The imaging device according to claim 21, further comprising
a color filter array disposed on the light-receiving surface such that the photosensors in each unit of the adding-up substantially have a same color.
24. (Original) The imaging device according to claim 21, further comprising

a color filter array disposed on the light-receiving surface such that the photosensors in each unit of the adding-up have different colors from each other.

25. (Original) The imaging device according to claim 20, wherein:

said plurality of photosensors are arranged in a diagonal grid pattern on the light-receiving surface; and

in the grid imaging mode said readout section adds up the photo signals in each area around a crosspoint of the grid pattern for readout.

26. (Original) The imaging device according to claim 25, further comprising

an optical low pass filter disposed on the light-receiving surface, for blurring an optical image in a direction substantially perpendicular to an adding-up direction of the photo signals.

27. (Original) The imaging device according to claim 25, further comprising

a color filter array disposed on the light-receiving surface such that the photosensors in each unit of the adding-up substantially have a same color.

28. (Original) The imaging device according to claim 25, further comprising

a color filter array disposed on the light-receiving surface such that the photosensors in each unit of the adding-up have different colors from each other.

29. (Withdrawn) The imaging device according to claim 20, further comprising

an image processing section for applying interpolation to outputs read out in the diagonal grid imaging mode to generate image data having a grid pixel pattern.

30. (Canceled)

31. (Original) An imaging device comprising:

a plurality of photosensors two-dimensionally arranged on a light-receiving surface, for generating photo signals in accordance with an amount of received light;

a plurality of vertical CCDs provided between arrays of said plurality of photosensors in a vertical direction on the light-receiving surface, for vertically transporting the photo signals outputted from said photosensors;

first horizontal transport parts provided at one ends of said vertical CCDs, for horizontally transporting the photo signals outputted from the one ends; and

second horizontal transport parts provided at the other ends of said vertical CCDs, for horizontally transporting the photo signals outputted from the other ends, wherein

said vertical CCDs have two transport electrodes for each of said photosensors, and every two pairs of the two transport electrodes for the photosensors have electrically crosswise connection to each other, the photosensors being adjacent to each other in a horizontal direction.